

REMARKS

Reconsideration of the above-identified application is requested in view of the remarks that follow.

In the October 14, 2004, Final Rejection in this application, the Examiner rejected claims 3-6 under 35 USC §102(b) as being anticipated by the Kipphan et al. reference. As indicated above, claims 3-6 have been cancelled; new independent claim 7 and claims 8-11 depending therefrom have been added. For the reasons set forth below, it is believed that new claims 7-11 patentably distinguish over the teaching of the Kipphan et al. reference.

As discussed in the Summary of the Invention section of the application, the present invention is directed to an improved method of color control for printing presses. The improved method, defined by new independent method claim 7, converts color differences between the target area and a test area into solid ink density corrections through the use of a color space which is both colorimetric and more nearly related to the solid ink density differences than the CIE recommended uniform color spaces previously used. While the claim 7 method maintains the use of CIE recommended uniform color parameters, i.e. "first uniform color space", for determining whether or not a color correction is necessary, an alternate color representation, i.e. "second uniform color space", defined in claim 11 as colorimetric density, is used to determine the appropriate inking control adjustments.

Upon careful review of the Kipphan et al. reference, applicant believes that the reference neither teaches nor suggests the claim 7 method.

The Examiner states that Kipphan et al. teach utilizing a first uniform color space to determine whether a calculated color difference is within an established color tolerance. If the calculated color difference is determined to exceed the established color tolerance, then an ink correction value is calculated utilizing a second uniform color space, as recited in applicant's claims. However, upon reading the Kipphan et al. reference, applicant submits that all of the correction calculations taught by Kipphan et al. take place within a single defined uniform color space realm. That is, while measurements may be taken from a first and second physical color

“spaces” within a test area, the color representation, that is, the uniform color parameters, used in the Kipphan et al. technique are confined to a single color space.

Referring specifically to new method claim 7, it is recited therein that spectral reflectance values of a test area on the printed sheet are first measured. Measured spectral reflectance values are then converted to test color coordinates in a first uniform color space. The test color coordinates in the first uniform color space are then compared to target color coordinates in the first uniform color space to obtain color parameter difference values in the first uniform color space. The color parameter difference values in the first uniform color space are compared to established color tolerance values in the first uniform color space to determine whether the color parameter difference values exceed the tolerance. If the tolerance is exceeded, then a control value for the printing press is calculated utilizing a second uniform color space, i.e., colorimetric density difference values resulting from a comparison of colorimetric density values measured on the printed sheet and target colorimetric density values.

New claim 8 states that the control values for the printing press are calculated by converting the colorimetric density difference values to solid ink density difference values using a linear matrix equation.

New claim 9, as discussed, recites that the first uniform color space utilized for determining whether or not the printed sheet is within a specified tolerance is CIELAB.

New claim 10 recites that the first uniform color space utilized for determining whether the printed sheet is intolerance is CIELUV.

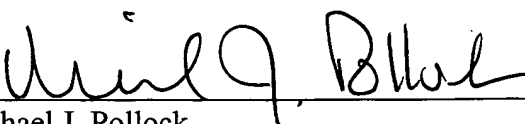
New claim 11 recites that the second uniform color space utilized to generate a control signal for the press is based upon colorimetric density.

For the reasons set forth above, applicants are of the belief that all claims now present in this application patentably distinguish over the prior art. Therefore, it is requested that this application be passed to allowance.

Respectfully submitted,

STALLMAN & POLLOCK LLP

Dated: April 13, 2004

By: 
Michael J. Pollock
Reg. No. 29,098

Attorneys for Applicant(s)